

# Remarks for the Innovation Roundtable University of Sydney

(*As delivered – May 28, 2015*)

Innovation lies at the very heart of what it means to be an American. From the beginning, our country was a grand experiment. We believed then – and now – that freedom plus sweat equals progress. And if you add creativity or innovation, you get progress squared.

One of the United States' greatest presidents, Abraham Lincoln, was not just a tremendous leader but an innovator as well. In 1849, he was granted patent number 6,469 for a device that would lift boats stuck on sandbars.

Lincoln was fascinated by new technology. As president, he pioneered the use of the telegraph as a kind of early smart phone, and he monitored the unfolding of our Civil War daily through telegrams.

He knew then what many of us know now – innovation, invention, and creativity are necessary ingredients for success.

President Obama believes our world is full "of unprecedented perils, but also unparalleled potential." Because of this, investment in science, technology, and research is the most important guarantee we can make for our future.

We don't know where our economies will take us. We don't know where the jobs of the 21<sup>st</sup> century will be. We don't know where the next super storm or pandemic will hit. We *do* know that we need to be prepared.

Focusing on innovation will help us face the challenges of climate change, an aging population, and a changing energy landscape. Innovation will help us find cures for the most devastating diseases, explore new worlds, and provide clean water, plentiful food, and safe housing to the billions of people living here on Earth.

And so the United States is investing in basic research through the President's Strategy for American Innovation. We are promoting U.S. exports. We are actively supporting entrepreneurs. And we are making historic investments in – among other things – clean energy technology, medical research, and advanced vehicle technologies.



Finally, we are promoting investment in science, technology, engineering and math – or STEM – education. Improving STEM education will be crucial if we want to maintain our competitive edge in the future. We are building public-private partnerships and putting 100,000 more STEM teachers into classrooms over the next decade. We cannot solve the challenges of tomorrow without the next generation of scientists, astronauts, engineers, and programmers.

So we need all of you young people to engage, too. I'd be remiss in my duty as U.S. Ambassador if I didn't encourage all of the bright young people here to consider building on your academic credentials or obtaining a higher degree at a U.S. university when you're finished your studies here!

President Obama wants America to lead the way in science, technology, and R&D. And I think we will. But I also think – like the President – that it is important to work closely with our friends and partners. Americans don't have a monopoly on good ideas or talented people. Scientists and engineers across the globe are revolutionizing our world.

If we want to solve the world's greatest problems, we must look beyond our borders and increase our cooperation.

We could have no better partner in this effort than Australia.

Australians – like Americans – are natural innovators, builders, and creators. You have drive, ambition, and skill. You view a problem as an opportunity to come up with a solution.

We want to do even more work with you – sharing ideas, technology, and research. This will make both of our countries stronger and more productive. It will lead to more jobs, a cleaner planet, and a better standard of living – for all of us.

In Sydney, you are well ahead of the curve when it comes to innovation, research, and problem solving. 3M's Innovation Center is here. Fishburners in Ultimo provides a home and resources for more than one hundred startups any one of which could be the next great software or ecommerce success story. Local companies Atomo, a developer of next-generation diagnostic testing, and Uscom, a medical device manufacturer, recently received prestigious Johnson & Johnson Innovation Industry Excellence Awards.

There have been some amazing breakthroughs in medicine and biotechnology here. The Lord Mayor is committed to ensuring that the CBD be completely powered by clean energy by 2030.



Here at the University of Sydney, you are doing tremendous work in engineering, in brain and other medical research, and in business and agriculture.

U.S. companies are also big fans of Australian innovators, and have been for quite some time. You don't have to look any further than the Pyrmont Bridge in Darling Harbour to see a shining example of our cooperation.

The current bridge opened in 1902. It is one of the oldest electric swingspan bridges still in operation. The swingspan of the bridge has opened more than 600,000 times in its lifetime, and it is still driven by the original General Electric motors 113 years later.

The electric motors were considered an unorthodox – not to mention un-British – choice at the time they were installed. But like their descendants, the designers of the bridge were innovators who weren't averse to trying out new technology.

GE still has some impressive partnerships here in Australia. Along with CSIRO, it funds research projects across the country in fields as diverse as aviation, healthcare, and energy.

Boeing's largest research facility outside of the United States is in Australia. The company's partnerships here – with universities, with the private sector, and with CSIRO – mean that it has a huge pool of talent to draw on to advance the components and technologies it uses and improve safety even more.

And other U.S. companies from Microsoft to 3M to Medtronic have come to Sydney and New South Wales to invest in the intelligent, hard-working Australians who are at the heart of these companies' global R&D efforts.

Americans and Australians are working to research liquid metal batteries that will store power at a dramatically reduced cost and could increase the utility of renewable energy sources. We are working to study whales so we can better conserve them, we model the effects of climate change on the oceans and their inhabitants, and we cooperate in a broad range of medical disciplines.

Our cooperation in research and development spans universities and government, think tanks and corporations. These partnerships help our economies expand, develop, and compete in the world market. Creative people and creative companies are teaming up to figure out how to deal with a changing world, changing markets, and a changing climate.

And these partnerships are necessary to spark innovation, which the Grattan Institute has identified as one of the keys to improving productivity in Australia.



But one of the concerns I have heard voiced over and over across Australia is about the difficulty of getting ideas funded so that projects could make the leap from the drawing board to the market. Making a scientific or technological breakthrough shouldn't be the easy part of the equation.

That is, in part, why we began this series of conversations: We need to put students, business leaders, academics, scientists, researchers, government officials, venture capitalists, and entrepreneurs in the same room so that we can discuss best practices and ideas for expanding cooperation – and then put those ideas into action.

Of course, not all innovation cooperation is – or needs to be – serious.

Some of our most widespread innovation cooperation takes place in the realm of entertainment.

*The LEGO Movie* – it's awesome! – distributed by Warner Brothers, has made nearly half a billion dollars worldwide. The brains behind it are Sydney's own Animal Logic. I'm incredibly pleased that Zareh Nalbandian (Za-RAY Nal-ban DEE-an), Animal Logic's CEO, could be here with us today.

This studio is a prime example of the talent and creativity that is typical of Australians. They were the first studio in Australia to make a feature length animated film – *Happy Feet*. That year, Animal Logic's singing and dancing penguins beat out *Cars* – made by those underdog animators at Disney/Pixar – for an Oscar. Pretty good for a first try.

Whether we are making people's days a little lighter with entertainment, or improving their health with medical advances, it is important to remember our greatest responsibility: a better world. If we want to give our children a better world, we absolutely must pursue and apply the research that will make it happen.